STATES PATENT AND TRADEMARK OFFICE UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR 10/020,909 12/19/2001 Abdus Samad Kudrolli KSIPL-2 1482 7590 03/14/2008 **EXAMINER** Jay P. Kesan 2420 Nottingham RUTLEDGE, AMELIA L Champaign, IL 61821 ART UNIT PAPER NUMBER 2176 MAIL DATE **DELIVERY MODE** 

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# **Technology Center 2100**

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/020,909 Filing Date: December 19, 2001 Appellant(s): KUDROLLI ET AL.

Jay P. Kesan For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 12/04/2007 appealing from the Office action mailed 02/06/2007.

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

# (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

6,246,442	HARADA	6-2001	
5,808,914	SHIN	9-1998	

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 17-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Harada et al. (hereinafter "Harada"), U.S. Patent No. 6,246,442, issued June 2001.

Regarding independent claim 17, Harada teaches a computer executable method of displaying a broadcasting program guide table of columns and rows forming cells, to optimally display information selected by a user, determining an optimum cell

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size and cell layout, and the degree of detail of information (Abstract; Col. 6, I. 14-65). Harada teaches determining the display space requirements (DSR) for displaying the information elements within the cells (Fig. 52, Fig. 56; Col. 8, I. 13-31).

Harada teaches (a) determining display space requirement (DSR) for displaying the elements; (b) determining moderated display space requirement (ModDSR) values for elements corresponding to each column or row. Harada teaches moderating the DSR of an element to determine the moderated DSR value by reducing the value of the element such that the amount of reduction depends on the difference between the DSR value of the element and a value representative of the DSR values of the elements corresponding to the column or row to which the element corresponds, since Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48). Similarly, Harada teaches displaying the elements in the space allocated to the corresponding cells.

Harada teaches determining the optimum distribution of elements across columns and across rows, i.e., the X and Y axis; and allocating cell widths based on the X or Y axis restrictive condition, i.e. row heights or column widths, respectively (Col. 61, I. 32-Col. 62, I. 64), compare to *measuring the lopsidedness of distribution of larger elements across columns and across rows*; and correspondingly allocating column widths or row heights. Harada teaches allocating column widths and row heights based on the ModDSR values such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1). Further, it is inherent in the

disclosure of Harada that the table size of the program guide would be calculated not to exceed the width and height of the screen, since the table cell elements are compacted to show the maximum possible amount of program guide elements (Col. 16, I. 1-39, especially I. 33-39).

Regarding dependent claims 18 and 19, Harada teaches moderating the DSR of an element to determine the moderated DSR value by reducing the value of the element such that the amount of reduction depends on the difference between the DSR value of the element and a value representative of the DSR values of the elements corresponding to the column or row to which the element corresponds, since Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48). Harada teaches allocating column widths and row heights based on the ModDSR values such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1).

Regarding dependent claims 20 and 21, Harada teaches determining the optimum distribution of elements across columns and across rows, i.e., the X and Y axis; and allocating cell widths based on the X or Y axis restrictive condition, i.e. the higher of row heights or column widths, respectively (Col. 61, I. 32-Col. 62, I. 64).

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Regarding independent claim 22, Harada teaches a computer executable method of displaying a broadcasting program guide table of columns and rows forming cells, to optimally display information selected by a user, determining an optimum cell size and cell layout, and the degree of detail of information (Abstract; Col. 6, I. 14-65). Harada teaches determining the display space requirements (DSR) for displaying the information elements within the cells (Fig. 52, Fig. 56; Col. 8, I. 13-31).

Harada teaches checking whether the predetermined two dimensional display space is adequate for displaying the information array elements in a matrix format, since Harada teaches determining the optimum size of a cell related to a display area and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48). Similarly, Harada teaches displaying the elements in the space allocated to the corresponding cells.

Harada teaches allocating column widths and row heights based on the total of the DSR values of the cell content such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1). Further, it is inherent in the disclosure of Harada that the table size of the program guide would be calculated not to exceed the width and height of the screen, since the table cell elements are compacted to show the maximum possible amount of program guide elements (Col. 16, I. 1-39, especially I. 33-39).

Regarding dependent claim 23, Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48). Similarly, Harada teaches displaying the elements in the space allocated to the corresponding cells. Harada teaches allocating column widths and row heights based on the ModDSR values such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1). Further, it is inherent in the disclosure of Harada that the table size of the program guide would be calculated not to exceed the width and height of the screen, since the table cell elements are compacted to show the maximum possible amount of program guide elements (Col. 16, I. 1-39, especially I. 33-39).

Regarding dependent claim 24, Harada teaches using a background color to make up for loss of alignment of cells across columns or rows, as when icons are substituted for text and program genre groups (Col. 22, I. 37 -Col. 23, I. 20).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-16 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada in view of Shin et al. (hereinafter "Shin"), U.S. Patent No. 5,808,914, issued September 1998.

Regarding independent claim 1 and dependent claims 27 and 28, Harada teaches a computer executable method of displaying a broadcasting program guide table of columns and rows forming cells, to optimally display information selected by a user, determining an optimum cell size and cell layout, and the degree of detail of information (Abstract; Col. 6, I. 14-65). Harada teaches determining the display space requirements (DSR) for displaying the information elements within the cells (Fig. 52, Fig. 56; Col. 8, I. 13-31). Harada teaches displaying the elements in the space allocated to the corresponding cells. Harada teaches allocating column widths and row heights based on the ModDSR values such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1). Further, it is inherent in the disclosure of Harada that the table size of the program guide would be calculated not to exceed the width and height of the screen, since the table cell elements are compacted to show the maximum possible amount of program guide elements (Col. 16, I. 1-39, especially I. 33-39).

Harada teaches moderating the DSR value of at least one element to determine its moderated display space requirement (ModDSR) value, since Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48).

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However, Harada does not explicitly teach wherein said moderating step comprises selecting an element whose DSR value is larger than the DSR value of at least one element in the column or row to which said element corresponds, and reducing the DSR value of the selected element such that the amount of reduction depends on the difference between the DSR value of said element and a value representative of the DSR values of the elements corresponding to the column or row to which said element corresponds, because Harada does not provide the exact algorithm used to optimize the display space. Harada does suggest these limitations, since Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48).

Shin is relied upon to disclose moderating the DSR value of at least one element to determine its moderated display space requirement (ModDSR) value (Fig. 8, 9, col. 10, I. 37-col. 11, I. 32), wherein said moderating step comprises selecting an element whose DSR value is larger than the DSR value of at least one element in the column or row to which said element corresponds (col. 5, I. 50-col. 6, I. 32), and reducing the DSR value of the selected element such that the amount of reduction depends on the difference between the DSR value of said element and a value representative of the DSR values of the elements corresponding to the column or row to which said element corresponds (col. 19, I. 45-col. 23, I. 40; col. 26, I. 6-22; col. 38, I. 37-54; col. 45, I. 30-50; claims 1 and 10). Specifically, Shin teaches applying a linear equation and a section constraint condition for setting the height and width of a table cell, row, and

column (Abstract); effectively reducing the DSR value of the selected element such that the amount of reduction depends on the difference between the DSR value of said element and a value representative of the DSR values of the elements corresponding to the column or row to which said element corresponds.

Both Shin and Harada are directed toward optimizing table layout for cells containing varying sizes of data. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the table layout method disclosed by Shin to the broadcasting program guide table display disclosed by Harada, so that Harada would have the benefit of a method of automatically laying out the table and the text within each cell so that lines of text would be automatically adjusted (Shin, col. 6, l. 46-64).

Regarding dependent claim 2, Harada teaches measuring text of a uniform font size, permitted minimum font size, and measuring text using a uniform font size for each group of elements required to be displayed using a common font size (Col. 27, I. 35-Col. 28, I. 48).

Regarding dependent claim 3, Harada teaches determining the DSR of text elements after abbreviating the text (Col. 26, I. 30-67).

Regarding dependent claim 4, Harada teaches at least (d) any representative value derived from the DSR values of one or more elements corresponding to the

column or row, respectively, since Harada teaches reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48) for a group of cells.

Regarding dependent claim 5, Harada teaches determining a measure of the space wastage inherent to a matrix format display, since Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48). Similarly, Harada teaches displaying the elements in the space allocated to the corresponding cells. Harada teaches allocating column widths and row heights based on the ModDSR values such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1).

Regarding dependent claim 6, Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29).

Regarding dependent claims 7 and 8, Harada teaches determining the optimum distribution of elements across columns and across rows, i.e., the X and Y axis; and allocating cell widths based on the X or Y axis restrictive condition, i.e. row heights or column widths, respectively (Col. 61, I. 32-Col. 62, I. 64).

Regarding dependent claim 9, Harada teaches measuring text of a uniform font size, and measuring text using a uniform font size for each group of elements required to be displayed using a common font size (Col. 27, I. 35-Col. 28, I. 48).

Regarding dependent claim 10, Harada teaches determining the DSR of text elements after abbreviating the text (Col. 26, I. 30-67).

Regarding dependent claims 11 and 12, Harada teaches determining the display space requirements (DSR) for displaying the information elements within the cells (Fig. 52, Fig. 56; Col. 8, I. 13-31), to determine an optimal display size, the minimum space required to display the maximum amount of information elements in tabular format. Harada teaches calculating DSR with regard to user preferences relating to degree of information detail, i.e., acceptable extent of text abbreviation (col. 57, I. 36-50).

Regarding dependent claim 13, Harada teaches an embodiment where elements of the table include images, instead of text strings, and the images include reduced size icons to reduce their DSR (Col. 24, I. 29-63).

Regarding dependent claim 14, Harada teaches that a variety of different images may be used in the guide cells (Col. 37, I. 1-15). It is inherent in the disclosure of Harada that the proportion of reduction would be less for a smaller image and more for a larger image, since Harada teaches the use of both icons, with small degree of

reduction (Fig. 33), and representative pictures of broadcasting programs, which would have a larger degree of reduction so as to be able to fit within the tabular display.

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Regarding dependent claim 15, Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells to be smaller so that they will not overlap the larger cell containing more information (Fig. 56; Col. 56, I. 46-Col. 57, I. 29; especially I. 9-28).

Regarding dependent claim 16, Harada teaches a printer functioning as the output unit (Col. 66, I. 21).

Regarding independent claim 25, claim 25 reflects the system used for implementing the method as claimed in claim 1, and is rejected along the same rationale.

Regarding dependent claim 26, Harada teaches specifying text of a uniform font size, permitted minimum font size, and measuring text using a uniform font size for each group of elements required to be displayed using a common font size (Col. 27, I. 35-Col. 28, I. 48).

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# (10) Response to Argument

Pages 18-23 of the Brief summarize the references cited in the claim rejections, Appellant's invention, and the legal standards for anticipation and obviousness.

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Beginning on page 24 of the Appeal Brief ("the Brief"), Appellant argues the following issues which are addressed below.

a. "VI. Claims 17-24 are novel over the Harada reference, and claims 1-16 and 25-28 are not obvious over the Harada reference in view of the Shin reference." (page 24 of the Brief).

The examiner respectfully disagrees, because Harada teaches and anticipates the limitations of claims 17-24, and the combination of Harada and Shin teach and render obvious the limitations of claims 1-16 and 25-28.

1. **"Claims 17-24 are novel over the Harada reference."** (pages 24-27 of the Brief).

Appellant argues that the rejection of independent claim 17 under 35 U.S.C. 102(e) as being anticipated by Harada (p. 2 of the Final Office Action), is contradicted by the rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Harada in view of Shin (p. 7 of the Final Office Action), see p. 24-25 of the Brief.

Appellant's argument that the rejection of claim 1 contradicts the rejection of claim 17 is incorrect for the following reasons: the argument ignores the fact that the two claims, 1 and 17, are rejected under different grounds, different statutory basis, and different combinations of references.

Further, Appellant has misquoted the rejection of claim 1 as written in the Final Office Action, page 7, by citing the first three lines of claim limitations for method step (b) but omitting the following six lines of the claim limitations, which were cited as a whole in the Final Office Action, page 7, because they disclosed the entire method step. The rejection of claim 1 recited the following limitations, which were listed as step (b):

- (b) moderating the DSR value of at least one element to determine its moderated display space requirement (ModDSR) value, wherein said moderating step comprises:
- (i) selecting an element whose DSR value is larger than the DSR value of at least one element in the column or row to which said element corresponds, and
- (ii) reducing the DSR value of the selected element such that the amount of reduction depends on the difference between the DSR value of said element and a value representative of the DSR values of the elements corresponding to the column or row to which said element corresponds;...

It is respectfully noted that the limitations of claim 17 and claim 1 do not recite the same method steps, which was the reason that different grounds for rejection were used. Appellant also ignores the text of the rejection of claim 1 following the cited limitation, which explains "Harada does suggest these limitations, since Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56;

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Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48)." (see p. 7, par. 2 of Final Rejection).

In response to Appellant's arguments regarding the rejection of independent claim 17 as anticipated by Harada (p. 25, par. 2 - p. 27 of the Brief), Harada does teach (a) determining display space requirement (DSR) for displaying the elements; and

(b) determining moderated display space requirement (ModDSR) values for elements corresponding to each column or row, since Harada teaches determining the optimum size of a cell and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48).

Harada teaches determining the optimum distribution of elements across columns and across rows, i.e., the X and Y axis; and allocating cell widths based on the X or Y axis restrictive condition, i.e. row heights or column widths, respectively (Col. 61, I. 32-Col. 62, I. 64), compare to *measuring the lopsidedness of distribution of larger elements across columns and across rows*; and correspondingly allocating column widths or row heights. Harada teaches allocating column widths and row heights based on the ModDSR values such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1).

Appellant specifically argues that Harada does not teach method step (d) of claim 17 (p. 25-26 of the Brief), where claim 17 recites: (d) depending upon whether the lopsidedness is greater across columns or across rows, allocating column widths or row

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heights, respectively, as a first allocation based on ModDSR values or on values obtained by using the ModDSR values and thereafter in a second allocation allocating row heights or column widths, respectively, such that the total width of all the columns and the total height of all the rows do not exceed the width and height, respectively, of the predetermined two dimensional display space;... However, Harada explicitly discloses the conditional allocation of column widths or row heights based on space required by content, i.e., lopsidedness; at Col. 61, I. 32-Col. 62, I. 64. Therefore, Harada teaches the conditional allocation of column widths or row heights based on ModDSR values, i.e., the space required by the content within each cell.

While Appellant argues that Harada does not teach the conditional allocation of column widths or row heights as a first allocation as set forth in claim 17, method steps (c) and (d) (p. 25, par. 2-p. 26, par. 1 of the Brief), Appellant's characterization of Harada is based on an embodiment which was not relied upon or cited in the rejection of claim 17, because Appellant cites Harada at col. 37, I. 62-col. 38, I. 8. It is respectfully noted that Harada discloses twenty-six embodiments of invention, and Appellant's arguments against Harada disclosing a restrictive condition cite a portion of the reference describing an embodiment not relied upon for the claim rejection, and ignore the portions of Harada which were cited for the rejection of claim 17.

While Appellant argues that the "restrictive condition" disclosed by Harada is different from the method disclosed in claim 17 of measuring lopsidedness of distribution of large elements in the table, across columns or across rows (p. 25, par. 2-p. 26, par. 1 of the Brief), Appellant's arguments are based on the premise that Harada

only discloses one condition for allocating space in rows or columns, i.e., the X or Y axis of the table. Appellant, relying on the incorrectly cited portion of Harada (p. 26, par. 1 of the Brief), argues that Harada only discloses a condition that "the ratio of longitudinal side length (cell height) to lateral side length (width) should be approximately equal to 1" and lists two other conditions supposedly different from claim 17.

However, Appellant's argument ignores the portion of Harada cited in the rejection of claim 17, which recites in part "Also, a restrictive condition such that the number of display units along one display axis is set as large as possible is selected as one particular cell layout restrictive condition..." (see Harada at col. 61, I. 41-45). In this embodiment, Harada discloses allocating column widths or row heights based on the total display space available, and based on comparing differences between cell content, i.e., lopsidedness. Figure 61 is referenced in the portion of Harada cited in the rejection of claim 17, and illustrates how Harada allocates row height and column width along the X (horizontal row) or Y (vertical column) axis, based on restrictive conditions setting the allocations of row height and column width based on the optimum cell attribute relationship, i.e., the lopsidedness of content among cells, rows, and columns (Harada, Col. 61, I. 32-Col. 62, I. 64).

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FIG. 61

		-		
6	0	<b>3</b>	<b>(4)</b>	<b>(B)</b>
	<b>®</b>	0	(12)	* * * * * *
7	0	3	<b>(4)</b>	<b>(b)</b>
	<b>®</b>	0	02	
8	Φ	(3)	<b>3</b>	<b>®</b>
	<b>3</b>	100	122	
9	Φ	<b>3</b>	<b>(4)</b>	<b>(6</b> )
	<b>(B)</b>	100	12	9.

Figure 61 of Harada, showing a larger allocation of display space for column width.

In response to Appellant's arguments regarding independent claim 22 (p. 26-27 of the Brief), it is respectfully noted that Appellant does not present substantive arguments against the rejection of claim 22. Further, the cited portions of Harada disclose each and every limitation claim 22 for the following reasons:

Harada does teach determining the display space requirements (DSR) for displaying the information elements within the cells (Fig. 52, Fig. 56; Col. 8, I. 13-31). Harada teaches checking whether the predetermined two dimensional display space is adequate for displaying the information array elements in a matrix format, since Harada teaches determining the optimum size of a cell related to a display area and adjusting the size of adjacent cells (Fig. 56; Col. 56, I. 46-Col. 57, I. 29) as well as reducing the font size of text elements to an optimum size (Col. 27, I. 35-Col. 28, I. 48). Similarly,

Harada teaches displaying the elements in the space allocated to the corresponding cells.

Harada teaches allocating column widths and row heights based on the total of the DSR values of the cell content such that the table size does not exceed the width and height of the predetermined display space (Col. 64, I. 9-38; Claim 1). Further, it is inherent in the disclosure of Harada that the table size of the program guide would be calculated not to exceed the width and height of the screen, since the table cell elements are compacted to show the maximum possible amount of program guide elements (Col. 16, I. 1-39, especially I. 33-39).

2. "Claims 1-16 and 25-28 are not obvious over the Harada reference in view of the Shin reference." (pages 27-31 of the Brief).

Appellant's arguments regarding the Harada patent as cited in the claim rejections of independent claims 1 and 25 are substantially similar to Appellant's arguments in regard to Harada for the rejections of claims 17 and 22.

While Appellant argues that Harada does not teach the conditional allocation of column widths or row heights as a first allocation as set forth in claim 1, method step (c) (p. 26-28 of the Brief), Appellant's characterization of Harada is based on an embodiment which was not relied upon or cited in the rejection of claim 1, because Appellant cites Harada at col. 37, I. 62-col. 38, I. 8. It is respectfully noted that Harada discloses twenty-six embodiments of invention, and Appellant's arguments against

Harada disclosing a restrictive condition cite a portion of the reference describing an embodiment not relied upon for the claim rejection, and ignore the portions of Harada which were cited for the rejection of claim 1.

Harada explicitly discloses the conditional allocation of column widths or row heights based on space required by content, i.e., lopsidedness; at Col. 61, I. 32-Col. 62, I. 64. Therefore, Harada teaches the conditional allocation of column widths or row heights based on ModDSR values, i.e., the space required by the content within each cell.

In response to Appellant's arguments in regard to the Shin patent (p. 29-31 of the Brief), which is relied upon to teach the method step (b) claimed in claim 1, Shin is relied upon to disclose moderating the DSR value of at least one element to determine its moderated display space requirement (ModDSR) value (Fig. 8, 9, col. 10, I. 37-col. 11, I. 32), wherein said moderating step comprises selecting an element whose DSR value is larger than the DSR value of at least one element in the column or row to which said element corresponds (col. 5, I. 50-col. 6, I. 32), and reducing the DSR value of the selected element such that the amount of reduction depends on the difference between the DSR value of said element and a value representative of the DSR values of the elements corresponding to the column or row to which said element corresponds (col. 19, I. 45-col. 23, I. 40; col. 26, I. 6-22; col. 38, I. 37-54; col. 45, I. 30-50; claims 1 and 10). Specifically, Shin teaches applying a linear equation and a section constraint condition for setting the height and width of a table cell, row, and column (Abstract);

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effectively reducing the DSR value of the selected element such that the amount of reduction depends on the difference between the DSR value of said element and a value representative of the DSR values of the elements corresponding to the column or row to which said element corresponds.

While Appellant argues that Shin's method of setting the height and width of a table cell, row, and column by applying a linear equation and a section constraint condition for setting the height and width of a table cell, row, and column is different from the method disclosed by Appellant, the examiner respectfully disagrees. Claim 1, method step (b) recites: (b) moderating the DSR value of at least one element to determine its moderated display space requirement (ModDSR) value, wherein said moderating step comprises:

- (i) selecting an element whose DSR value is larger than the DSR value of at least one element in the column or row to which said element corresponds, and
- (ii) reducing the DSR value of the selected element such that the amount of reduction depends on the difference between the DSR value of said element and a value representative of the DSR values of the elements corresponding to the column or row to which said element corresponds;...

As disclosed by Shin, the linear equation and section constraint condition for setting height and with of table cells, rows, and columns result in a method of selecting an element and reducing the display space required by the selected element as claimed in step (b) of Appellant's claim 1, because Shin teaches that the linear equation is used to calculate the difference between the display space required by a text element in a

cell, and a value representative of the display space value of the elements of the row or column to which the cell corresponds (col. 5, I. 50-col. 6, I. 32), resulting in a reduced display space requirement for the text element.

While Shin discloses the use of linear programming to reduce the display space requirement values of table elements and to determine the difference between the display space required by the element and elements corresponding to the column or row, which is more complex than the method set forth by Appellant, Shin does meet the limitations of claim 1 because the linear equations are used to accomplish the same method steps as claimed in step (b). For example, Fig. 2(A) of Shin discloses the commonly known prior art method of compacting a table display by reducing row height and column width to fit the cell text display requirements (col. 2, I. 10-col. 3, I. 26), which is solved by the linear equation and constraint conditions disclosed by Shin which were used to produce an automatic compressed table layout (Shin, col. 7, I. 14-col. 8, I. 8).

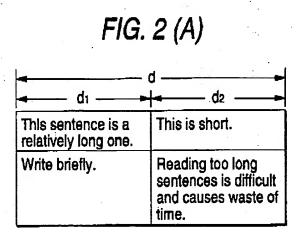


Fig. 2(A) of Shin showing how the difference in cell and table element display requirements is measured.

For these reasons, and since both Shin and Harada are directed toward optimizing table layout for cells containing varying sizes of data; it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the table layout method disclosed by Shin to the broadcasting program guide table display disclosed by Harada, so that Harada would have the benefit of a method of automatically laying out the table and the text within each cell so that lines of text would be automatically adjusted (Shin, col. 6, I. 46-64).

It is the examiner's opinion that the combination of Harada and Shin renders obvious the limitations of claims 1-16 and 25-28.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Amelia Rutledge/

Amelia Rutledge

February 28, 2008

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